SECTION 803 - LANDSCAPE PLATING MATERIALS:

803-1 Description: of the Standard Specifications is revised to read:

The work under this section shall consist of furnishing, placing, and compacting imported materials for plating embankment slopes, dikes, unpaved disturbed construction ground/soil surface and other designated areas, which shall include all excavation and backfilling; eradicating existing grasses and weeds with application(s) of an approved herbicide, and by mechanical methods; furnishing and applying herbicide mixed in water, which is placed on the cleared ground and on the decomposed granite /granite mulch; grading surfaces upon which imported material shall be placed, to ensure proper drainage and maintaining areas free of weeds and trash/debris during construction all in accordance with these specifications.

Decomposed Granite and Granite Mulch: of the Standard Specifications is modified to add:

The contractor shall <u>not</u> impair air and stormwater quality through selecting and installing rock materials to maximum extent practicable (MEP). Sedimentary rocks and/or rock materials that will naturally generate excessive fine particles beyond the specified amount as shown in the gradation requirements below shall <u>not</u> be allowed.

Decomposed granite/granite mulch to be placed at the designated locations shown on the project plans and/or in these Special Provisions. Decomposed granite/granite mulch shall be approved for color and gradation requirements before placement. The color to be used on the project shall match the existing adjacent decomposed granite/granite mulch color and shall be approved by ADOT Roadside Development through the Engineer prior to any processing or placement.

Contractor shall provide a 0.25-ton material sample spread over an area 2-inches deep for review. Criteria to be used for approval for project granite color(s) will be based on the following: similarity to the existing granite color for this highway section and the material's appearance after being wet and then dried.

Gradation requirements for the 1-1/4 inch granite mulch are as follows:

Passing Sieve	Percent
1¼ inch	100
³¼ inch	60-80
½ inch	45-65
No. 40	5 -20

803-3 Construction Requirements: of the Standard Specifications is modified to add:

The contractor shall receive approval from the Engineer for granite color before installation.

Granite to be used on the project must meet the following additional requirements, in addition to providing documentation from the contractor to the Engineer:

Copy of Environmental Permit for granite pit.

Written acknowledgement from the granite supplier that the material can be provided with the quantity of granite mulch needed for the project.

Written acknowledgement that granite supplier material will be provided within the contract construction time frame.

Granite mulch to be placed shall be spread and leveled on jobsite away from any traffic recovery areas.

Labeling of granite mulch shall first list on line one the name of the product, and on the second line shall appear the name of supplier. Text for labeling shall be waterproof, clearly legible, printed, and 1-inch capitalized text.

All granite mulch samples provided shall be clean and washed, leveled covering an approximate spread area of 5-feet **X** 5-feet, and signed identifying the product and source.

Remove all non-planted vegetation from all areas designated to receive granite mulch (by chemical or mechanical means) and maintain the designated areas "vegetation-free" prior to placement of the granite mulch, or as specified by the Engineer.

Prior to placement of the granite mulch, designated areas to receive granite mulch shall be made completely free of all grass, weeds, or other miscellaneous vegetation growth and have an approved herbicide applied. The herbicide shall be followed by an application of water for activation.

When using herbicides, the contractor shall comply with all applicable portions of Subsection 803-3.02 of the Standard Specifications. All dead vegetation (grass and weeds) shall be removed and properly disposed of. The contractor shall be responsible for all erosion repairs on project site that may occur during granite mulch color review and approval process at no additional expense to the Department.

803-3.02 Decomposed Granite and Granite Mulch: of the Standard Specifications is modified to add:

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The sub-grade upon which the granite mulch shall be placed, shall be graded and compacted to promote proper drainage, as approved by the Engineer. The sub-grade shall be compacted to between 85 to 90-percent of the maximum proctor density, as determined in accordance with the requirements of Arizona Test Methods 230 or 235, depending on the test method used to determine the compaction density (Sand Cone or Nuclear Method).

All vehicles used for spreading, grading and raking the granite mulch shall have one set of wheels with floatation tires having a minimum width of 18-inches to allow equal compaction of the granite mulch and decomposed granite.

Granite mulch shall be placed to a depth of 2-inches. After rough spreading and rough grading of the granite mulch within the designated areas, the granite mulch shall be raked evenly and thoroughly to blend the different gradation sizes.

The use of conveyor belt type equipment for placing granite mulch shall not relieve the contractor from the requirements of compacting the granite much.

After placement, the granite mulch shall be saturated with water to an optimum moisture level as recommended by the supplier. The Engineer will approve the amount of water necessary to aid in the compaction of the granite mulch, prior to application.

During the final spreading and final grading operations, all surfaces within the granite mulch areas shall be passed over by the spreading and grading equipment a minimum of 2-times.

Equipment operations for spreading, grading, raking, chemical application, water settling, and any other operations shall be done in a manner that uniformly maximizes the vehicle(s) wheel compaction over the surface area.

The pre-emergent herbicide shall be utilized in the manner recommended by the manufacturer to prevent germination of weeds/undesirable plant species, and shall be Gallery, Pendulum AquaCap, Surflan, Dimension, or an approved equal, and shall be applied at a rate based on product information/data for best control effects. Pre-emergent herbicide shall also be employed to the designated decomposed granite and granite mulch area, prior to the final water settling operation. Selection of pre-emergent herbicide products shall be based on the type of weeds or undesirable plant species to be treated as evaluated by a Construction Professional Landscape Architect and approved by the Engineer. The first application of pre-emergent herbicide and each subsequent application shall be from different products to optimize the lasting result of designated decomposed granite and granite mulch area.

After placing, spreading and grading the granite mulch, the contractor shall water settle the total thickness of the granite mulch, to remove the fine material from the surface. The water settling operation, noted above, shall be completed by applying water at

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minimum depth of $\frac{1}{2}$ -inch over the granite mulch placed or as approved by the Engineer.

803-4 Method of Measurement: the first paragraph of the Standard Specifications is revised to read:

Decomposed granite and granite mulch will be measured and by the square yard of material in place at the specified thickness. The quantity shown in the Bid Schedule will be used for payment of Item 8030092 - Granite Mulch (1-1/4 Inch Minus), unless both the contractor and the Engineer mutually agree that a variation in excess of 10 percent of this quantity exists. If a variation exists, the Engineer will determine the variation based on the project plans and evidence provided by the contractor. Acceptable form of evidence can be construction survey – such as making field measurements for verification as approved by the Engineer.

Basis of Payment: of the Standard Specifications is <u>modified to add:</u>

Payment for the accepted quantities of granite mulch measured as provided above will be made at the contract unit price per square yard, which price shall be full compensation for the work complete in place.

There shall be no separate measurement or direct payment for required or requested samples, grading, compaction, or pre-emergent herbicide. The cost for this work is considered to be included in the cost of the contract items.